ULM CATHEDRAL.

For this cathedral, which ranks amongst the finest in Germany, the city is indebted to the zeal of its inhabitants, who, from their own resources, without aid from prince or ecclesiastic, raised this noble monument to testify to their regard and reverence for religion.

The work was commenced A.D. 1377, towards the end of the reign of the Emperor Charles IV., a year memorable for the return of the pontifical see to Rome from Avignon, after an absence of 72 years. During the stormy reign of Wenceslaus, the son and successor of Charles, and the confusion and anarchy of ecclesiastical dissension, when Europe was torn by the factions of rival popes; under the more vigorous rule of the Emperor Sigismund, and the consolidation of the papal power under Pope Martin V., A.D. 1417, through the influence of the Council of Constance, quickly succeeded by the turbulent times of the early Reformers and the perplexities of the threatened Ottoman inundation; the cathedral, at the end of 100 years, in the reign of the emperor Frederick III. of Austria, approached the state of completion in which it now remains; and it is somewhat remarkable that in its regularity of execution it should in itself record so little of the stormy times which gave it birth.

The total length of the building is about 415 English feet, that is, 100 feet less than Canterbury cathedral, and 130 feet less than Winchester cathedral, but nearly corresponding to the length of Durham or Chichester cathedral. Whilst, however, the total dimension of the English works includes chapels and similar adjuncts of considerable extent, but small elevation, the cathedral of Ulm, surpassing the loftiest of them in altitude, is of one height throughout. In plan it consists of a choir about 100 feet long, with aisles, terminated eastward by an apse of three faces; a nave of nine bays, with double aisles on both sides, making a total width of 166 feet; and a tower opening to the west end of the nave.

The lofty windows of the choir contain much of ancient painted glass, with some of modern date. The stalls remain perfect, and are rich with tabernacle and quaint carving of excellent workmanship. A metal screen, painted and gilt, divides the choir from the nave. The nave, though beautiful in most respects, is the least satisfactory portion of the church, from the bare and unfinished appearance of the vaulting, which, differing in character from the rest of the work, would appear to belong to the latest period. The nave arcades have very sharp pointed and well moulded arches, with a fine range of clerestory windows above. The double aisles, perhaps the most beautiful part of the interior, are divided by a range of lofty cylindrical columns, rising to the height of the slender shafts attached to the nave piers, and sharing with them the support of the vaulting. The tower, though incomplete, is of considerable altitude: the west entrance of great beauty. The drawing of the original design (still in existence) shows a traceried spire, which would have risen to the height of 490 feet. The spire was abandoned in consequence of a serious settlement in the foundation of the tower, which threatened its destruction even before its completion.

The interior is exceedingly grand; but in the absence of stained glass in the nave, the light from the numerous large traceried windows is excessive. The exterior is impaired by the appearance of the brick facing to the plain surfaces, and also from the erection of small shops and stores between the boldly projecting buttresses.

Independent of the interest arising from the perfect execution, up to a certain point, of the original design, and its excellent preservation, both as to fabric and fittings, the cathedral contains many points of peculiar interest; and it would appear that its perfect state is due in some degree to its devotion since the Reformation to the Protestant form of worship.

The view is sketched from near the south-west angle of the building, looking diagonally across the nave and aisles, and shows the main features of those parts. A liberty has been taken in omitting the plain deal seats which fill the body of the church. G. M. H.

GOTHIC ORNAMENTATION.

ENRICHED MOULDINGS.

With regard to the controversy upon the subject of enriched Gothic mouldings in your journal, I am desirous of adding a few words in confirmation of the remarks of "W. H. B." In the first place I do not consider the principle advanced by Mr. Little to be correct, namely, "that the architects of the Middle Ages discarded the use of carving on mouldings, as practised in classic architecture;" and "that in all instances of enriched mouldings, the carving was *applied* on the mouldings, giving them a different contour, but preserving *in situ* their original forms." In addition to the English examples named, I can mention the Early Gothic doorways of the west front of Rouen Cathedral, which are on either side of the magnificent Flamboyant central portal—works of the most "*severe and massive*" character, in which nearly all the mouldings are decorated with sculptured foliage, having the contour hollow and similar to that of the mouldings. These include both the neckings of the columns and the impost mouldings. The same thing I have found upon the western doorway of the church at Lisieux, in Normandy, a work of the "*richer and more refined*" Early Gothic, and in numerous other instances upon the neckings and abaci of columns particularly; so that I believe the custom to be almost universal in the remarkably beautiful Gothic of Northern France, which so nearly resembles our own.

Again, in the Venetian Gothic such mouldings are to be continually found, as upon the neckings and abaci of the columns of the west front of St. Mark's. But these examples, including some of the most exquisite of Gothic details, may surely serve to show that the principle indicated is not at variance with Gothic architecture. Nor do I see the utility of endeavouring by any such theories to enhance the merit of the mediæval architects, who had in all things some better principle to guide them than the perverse one of striving to be as unlike the Romans as possible. We have been told before that the poor deluded men fancied they were following Vitruvius and his cramped rules, while they were building their glorious and unequal Cathedrals throughout the length and breadth of Northern Europe. John P. Seddons.

RAILWAY JOTTINGS.

A new town at Ashford.—The South-Eastern Company have erected a new town at Ashford—new from beginning to end—from site to latest improvements. This town when finished will be a second Wolverton or New Swindon, consisting of terraces of cottage houses with open pieces of grass land in front for recreation, baths, and washhouses for residents; and gas works now in course of erection. It is also intended to erect a new church. New Ashford, and the extensive railway works adjoining it, are built on a piece of land little better than a waste four years since. The new town is at a distance of about a mile from the centre of the old town.

Railway Mechanics' Institute at Stratford.—The workmen connected with the Eastern Counties' works at Stratford are about forming a mechanics' institute. The directors, it is said, have promised to aid the project by a donation of money and books. The institute will be open to others by small quarterly subscriptions.

Economization of Fuel, &c.—We understand that a patent has been obtained by some gentlemen in this city for an invention by which a new motive power is produced, which, it is said, will operate so as to reduce the consumption of fuel in railway engines one-half or more, and, with other important improvements, will effect a large saving in the construction of the engines.—*Exeter Flying Post.*

Chairs.—Thomas Hill, of Glasgow, has recently enrolled a patent for an improved mode of forming wrought-iron rail-chairs, from plates of wrought iron, by machinery, which punches up lips therefrom of a proper form, to embrace and secure the rail. The description of chairs thus formed, the patentee divides into several classes: firstly, that in which the lips of the chair are presented sideways to the rail. Secondly, that in which the lips of the chair are presented edgeways to the rail. Thirdly, that in which one or more of the lips are presented edgeways and the others sideways to the rail.

The Boyne Viaduct.—The works of this great bridge, according to the *Drogheda Argus*, are going forward with rapidity. The masonry has been commenced upon the south side of the river, immediately under the bank adjoining the terminus of the Dublin and Drogheda Railway. The foundations are here permanently laid on the solid rock. Two "Gantry cranes," made at the iron works of Greendon and Company, Drogheda, have been erected for the purpose of lifting and removing stones from any part of the quarry adjoining, and laying them down in a convenient situation for the stonecutters to dress. By means of this crane also large stones—several tons weight—are brought any distance where tramways are laid, and placed on a truck to be conveyed along a line of railway to where the masons may make use of them. A large number of men are employed in quarrying stones, and in cutting and dressing them. A quarry of black stone turned up in the immediate vicinity of the bridge. Large blocks of limestone are brought from a quarry near Skerries. Numbers of these stones are already dressed and marked, ready for the masons to use, and are intended to form the abutments of the arch of the great bridge. The driving of piles in the bed of the river is continued. Although the principal part of the work, as yet, may be said to lie on the south side, the works on the north side are also extensive. A large embankment has been made, which afforded employment to a considerable number of navigators. The bridges at Newfoundwell are in course of erection, as will soon also those over the road to the Chord, and that to cross the Strand-road, as well as the other mason works to connect the great arch, or centre one, under which the loftiest trading vessel that enters the harbour is to sail without striking or lowering her topmasts. At a rough estimate, there are 500 men employed by Mr. Evans, the contractor.

"The People's Carriage."—There is every appearance and probability that "the people"—the multitude—will now be permanently provided with their "carriage." Penny omnibuses are already "all the rage" in the metropolis, as at Liverpool, and we rejoice to hear that on one route, namely, along Oxford-street, they have already destroyed the old fourpenny monopoly, and are likely to spread far more generally than we had even intended them to do. They are now combined, it is true, with the second fare for longer distances, and it is said that they have already been found to be so profitable that they are to be "laid on" in every direction. It is probable, however, that we shall ultimately have a first and second class omnibus; for we understand that the working classes, unless when in holiday attire, dislike to enter omnibuses occupied by people better dressed at the moment than themselves, and it is but fair that they should have a work-day-class carriage of their own. The new association which we lately announced is not the only one in the field. A very hopeful one has since been projected, in 100,000 shares of 5*l.* each, of a capital of 500,000*l.*, to establish new and superior vehicles, as we suggested, on every route throughout the metropolis and its suburbs, at rates of 2d. the minimum, with 1d. for every mile beyond two, for which the first 2d. may be said to be charged. The only questionable point perhaps is, that no passenger is to be taken up at his own door or on the road, offices being to be opened for tickets to prevent the company from being plundered by their own servants. Why the public should pay for this by additional trouble we cannot see. Some other means ought to be resorted to.